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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/833,593	04/13/2001	Martin Philip Usher	11696. 0059	5641
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STEPTOE & JOHNSON LLP 1330 CONNECTICUT AVENUE, N.W. WASHINGTON, DC 20036			EXAMINER MILLER, BRANDON J	
			ART UNIT 2683	PAPER NUMBER
			DATE MAILED: 11/12/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/833,593

Applicant(s)

USHER ET AL.

Examiner

Brandon J Miller

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 7-8, 10, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmid in view of Sinivaara.

Regarding claim 1 Schmid teaches a system for connecting a cellular telephone located outside the range of a fixed cellular network (see col. 7, lines 30-32 & 40-43). Schmid teaches a movable cellular station mounted on a vehicle (see col. 6, lines 63-65). Schmid teaches a fixed cellular switching station (see col. 3, lines 25-26). Schmid teaches a radio link providing a communication path between the movable cellular station and the fixed cellular station (see col. 5, lines 35-37). Schmid also teaches a cellular phone in an in-flight telephone system operating in a similar manner as conventional telephone terminal (see col. 6, lines 60-65 and col. 7, lines 1-4 & 40-44). Schmid does not specifically teach receiving an indication from a cellular telephone that the cellular telephone is within a service area, registering the presence of the cellular telephone with a fixed cellular switching station, a fixed cellular station being capable of notifying other cellular stations within a fixed cellular network to directing an incoming call for the cellular telephone to the fixed station, receiving an incoming call for the cellular telephone, and directing the incoming call to a cellular telephone through a movable station over a radio

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link. Sinivaara teaches receiving information from a mobile subscriber that it is within a service area of the movable cellular station, and registering the presence of the mobile subscriber with a fixed cellular switching station (see col. 3, lines 29-36). Sinivaara teaches notifying a cellular station within a fixed cellular network to direct an incoming call for a mobile subscriber (see col. 4, lines 9-12). Sinivaara teaches receiving the incoming call for a mobile subscriber, and directing the incoming call to a mobile subscriber through the movable cellular station over the radio link (col. 4, lines 4-15). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include receiving an indication from a cellular telephone that the cellular telephone is within a service area, registering the presence of the cellular telephone with a fixed cellular switching station, a fixed cellular station being capable of notifying other cellular stations within a fixed cellular network to directing an incoming call for the cellular telephone to the fixed station, receiving an incoming call for the cellular telephone, and directing the incoming call to a cellular telephone through a movable station over a radio link because this would allow for flexible communications between a ground station and a cellular station located on a moving object.

Regarding claim 2 Schmid teaches a movable cellular station including at least one base station control (see col. 6, lines 63-65).

Regarding claim 7 Schmid teaches a movable cellular station mounted on a vehicle (see col. 6, lines 62-64 and FIG. 5). Schmid teaches a radio link providing a communication path between the movable cellular station and the fixed cellular station (see col. 5, lines 35-37). Schmid also teaches a cellular phone in an in-flight telephone system operating in a similar manner as conventional telephone terminal (see col. 6, lines 60-65 and col. 7, lines 1-4 & 40-44).

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Schmid does not specifically teach receiving a signal from a cellular telephone that the cellular telephone is within a service area, registering the presence of the cellular telephone with a fixed station, directing an incoming call for the cellular telephone, receiving an incoming call for the cellular telephone, and routing the incoming call from a fixed cellular switching station over a radio link. Sinivaara teaches receiving information from a mobile subscriber that it is within a service area of the movable cellular station, and registering with a fixed cellular switching station the presence of a mobile subscriber (see col. 3, lines 29-36). Sinivaara teaches directing an incoming call for a mobile subscriber, receiving an incoming call for the mobile subscriber, and routing the incoming call from a fixed cellular switching station over a radio link (see col. 4, lines 1-16). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include receiving a signal from a cellular telephone that the cellular telephone is within a service area, registering the presence of the cellular telephone with a fixed station, directing an incoming call for the cellular telephone, receiving an incoming call for the cellular telephone, and routing the incoming call from a fixed cellular switching station over a radio link because this would allow for flexible communications between a ground station and a cellular station located on a moving object.

Regarding claim 8 Schmid teaches a device as recited in claim 2 and is rejected given the same reasoning as above.

Regarding claim 10 Schmid teaches a radio link providing a communication path between the movable cellular station and the fixed cellular station (see col. 5, lines 35-37). Schmid also teaches a cellular phone in an in-flight telephone system operating in a similar manner as conventional telephone terminal (see col. 6, lines 60-65 and col. 7, lines 1-4 & 40-44).

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Schmid does not specifically teach receiving a signal indicating that a cellular telephone is within a service area, registering the presence of the cellular telephone as being within the service area, and sending an incoming call for the telephone to the movable cellular station over a radio link. Sinivaara teaches receiving information indicating that a mobile subscriber is within a service area and registering the presence of a mobile subscriber (see col. 3, lines 29-36). Sinivaara teaches sending an incoming call for a mobile subscriber to the movable cellular station over a radio link (see col. 4, lines 1-16). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include receiving a signal indicating that a cellular telephone is within a service area, registering the presence of the cellular telephone as being within the service area, and sending an incoming call for the telephone to the movable cellular station over a radio link because this would allow for flexible communications between a ground station and a cellular station located on a moving object.

Regarding claim 12 Schmid teaches connecting a cellular telephone within range of a movable cellular station and out of range of a fixed cellular network (see col. 7, lines 30-32 & 40-43 and FIG. 5). Schmid teaches a radio link providing a communication path between the movable cellular station and the fixed cellular station (see col. 5, lines 35-37). Schmid also teaches a cellular phone in an in-flight telephone system operating in a similar manner as conventional telephone terminal (see col. 6, lines 60-65 and col. 7, lines 1-4 & 40-44). Schmid does not specifically teach receiving a signal from a cellular telephone, registering the presence of the cellular telephone with the fixed telephone switching station, communicating the registration from the fixed cellular switching station to other switching stations, and directing an incoming call to a cellular telephone through the fixed cellular switching station and a movable

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cellular station. Sinivaara teaches receiving information from a mobile subscriber and registering the presence of a mobile subscriber (see col. 3, lines 29-36). Sinivaara teaches communicating the registration from the fixed cellular switching station (see col. 4, lines 4-9). Sinivaara teaches directing an incoming call to a mobile subscriber through the fixed cellular switching station and a movable cellular station (see col. 4, lines 10-16). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include receiving a signal from a cellular telephone, registering the presence of the cellular telephone with the fixed telephone switching station, communicating the registration from the fixed cellular switching station to other switching stations, and directing an incoming call to a cellular telephone through the fixed cellular switching station and a movable cellular station because this would allow for flexible communications between a ground station and a cellular station located on a moving object.

Claims 3-5, 9, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmid in view of Sinivaara and Horrер.

Regarding claim 3 Schmid and Sinivaara teach a device as recited in claim 1 except for a creating an identification code in association with a cellular telephone and storing the identification code. Schmid does teach a special number associated with a user for communications with a ground party using a cellular telephone (see col. 4, lines 37-39 and col. 7, lines 30-32). Horrер teaches a radio base station creating an identification number in association with a telephone and storing the identification code (see col. 2, lines 30-32 and col. 3, lines 50-53). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include creating an identification code in association with a

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cellular telephone and storing the identification code because this would allow for efficient communications between a ground station and a cellular station located on a moving object.

Regarding claim 4 Schmid, Sinivaara, and Horrer teach a device as recited in claim 3 and is rejected given the same reasoning as above.

Regarding claim 5 Horrer teaches creating a first identification number in association with a telephone, storing the first identification number, and routing calls based in part on the first identification number (see col. 2, lines 30-33 and col. 3, lines 50-54). Horrer teaches a second identification number in association with a telephone, storing a second identification number, and routing an incoming call based in part on the second identification number (see col. 3, lines 32-36 & 50-56).

Regarding claim 9 Horrer teaches an identification number in association with a telephone, storing the first identification number, and routing calls based in part on the first identification number (see col. 2, lines 30-33 and col. 3, lines 50-54).

Regarding claim 11 Horrer teaches a device as recited in claim 9 and is rejected given the same reasoning as above.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schmid in view of Sinivaara and Chambers.

Regarding claim 6 Schmid and Sinivaara teach a device as recited in claim 1 except for a system of satellites, a radio link being through one of the satellites; and means for changing a radio link to another of the satellites in response to a vehicle moving from an area covered by one of the satellites to an area covered by another of the satellites. Schmid does teach a satellite for communicating with a moving vehicle, with a radio link being through a satellite (see col. 5,

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lines 35-37 and FIG. 5). Chambers teaches a system of satellites capable of changing a radio link to another of the satellites in response to a vehicle moving from an area covered by one of the satellites to an area covered by another of the satellites (see pg. 9, 3rd paragraph and FIG. 2). It would have been obvious to one of ordinary skill in the art at the time the invention was created to make the device adapt to include a system of satellites, a radio link being through one of the satellites; and means for changing a radio link to another of the satellites in response to a vehicle moving from an area covered by one of the satellites to an area covered by another of the satellites because this would allow for continuous communication between a fixed station and a moving object.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lanzerotti U.S Patent No. 6,324,398 discloses a wireless telecommunications system having airborne base station.

Fukutomi U.S. Patent No. 5,842,132 discloses a mobile telecommunication method and system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon J Miller whose telephone number is 703-305-4222. The examiner can normally be reached on Mon.-Fri. 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 703-308-5318. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.


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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

November 3, 2003



WILLIAM TROST
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600